

**STATEMENT OF JOHN E. HIDLE  
REGARDING THE OPERATION OF W276AQ, FORT LEE, NEW JERSEY  
W232AL, POMONA, NEW YORK, AND WJUX(FM), MONTICELLO, NEW YORK  
PAGE 3**

Attachment 4 shows the equipment which provides the capability for W276AQ to directly translate the WJUX(FM) signal. The audio switcher and transmitter is the same as in Attachment 3. The Scala CA-2 receive antenna is mounted on the building roof. The 99.5 MHz cavity notch filter and the Sony XR2500 receiver are installed inside a locked weatherproof metal equipment enclosure also on the roof. The other equipment shown in Attachment 4 is located in the same 19" equipment rack which contains the equipment shown in Attachment 3.

At the Pomona, New York site utilized by W232AL signal level measurements were made. A Scala CA-2 receive antenna is mounted near the top of the tower. Its output is fed by RF coaxial cable to the 99.5 MHz cavity notch filter in the building. A short RF coaxial cable then connects the signal to the RF input of the Sony XR2500 receiver. A 3 dB signal splitter was used to facilitate RF signal level measurements. A Hewlett-Packard (HP) spectrum analyzer, Model 8568B, was connected to the RF line before the notch filter and signal levels were observed. FM radio station signals at 99.3 MHz = -70.9 dBm, 99.5 MHz = -79.3 dBm, 99.7 MHz = -80.0 dBm and 99.9 MHz = -70.4 dBm were present. The HP analyzer was then connected at the filter output/receiver input. At this point the signals at 99.3 MHz and 99.5 MHz disappeared below the analyzer noise floor. The WJUX(FM) signal at 99.7 MHz was measured to be -82.7 dBm and the signal 99.9 MHz was -73.7 dBm. Therefore the desired signal from WJUX is 26 dB above the minimum usable sensitivity of the Sony receiver used at the Pomona translator site.

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At the Fort Lee, New Jersey site utilized by W276AQ, signal level measurements were also made at two locations within the building. The spectrum analyzer was connected at the input to the Sony receiver on the 24<sup>th</sup> floor. FM signals were observed at 93.9 MHz = -62.6 dBm, 94.3 MHz = -63.6 dBm, 94.5 MHz = -83.2 dBm and 94.7 = -52.2 dBm. Therefore the desired signal from W232AL is 45 dB above the minimum usable sensitivity of the Sony receiver at Fort Lee used to receive the Pomona translator. While connected to the receive antenna which is oriented toward Pomona, New York, signals were observed at 99.5 MHz = -44.6 dBm, 99.7 MHz = -90.9 dBm and 99.9 MHz = -77.6 dBm. The desired signal from WJUX is 17 dB above the minimum usable sensitive of the Sony receiver.

In the basement of the building a portable FM receiver was positioned to maximize the reception of a signal on 94.3 MHz, providing acceptable audio from W232AL in Pomona.

Also in the basement a signal generator was connected through an RF power amplifier to a biconical antenna and used as a source of interference on 94.3 MHz. While the interfering antenna was located approximately 15 feet from the portable FM receiver, the signal level on 94.3 MHz into the antenna was increased until interference to the portable receiver was observed. The power into the antenna was about -15 dBm. When the interfering signal power into the antenna was reduced to -20 dBm no interference to the reception of W232AL by the portable receiver in the basement was discernable.

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Since the 99.5 MHz cavity notch filter and the other Sony XR2500 receiver are located in an enclosure on the roof, observations were made by listening to the audio output of the Sony receiver while it was tuned to 99.7 MHz. The receiver/notch filter combination provided an interference free audio signal of WJUX(FM). Tuning the receiver to 99.5 MHz resulted in excellent reception of WBAI(FM).

The signal levels from a receive antenna with directional gain were measured in dBm at the receiver RF input terminals. Given the receive antenna characteristics and height above ground, the line losses and filter responses, an estimate of the RF signal strength at the receive antenna can be made. At Pomona, New York the receive antenna is 315 feet above ground level, the antenna gain is 3 dB, the downlead loss is 11 dB, the filter insertion loss at 99.7 MHz is 2.7 dB and the splitter loss is 3 dB. Converting the -82.7 dBm to +26 dB $\mu$  and totaling the values, the receive antenna is estimated to be receiving a WJUX signal strength at its location of about 40 dB $\mu$ .

In a similar manner, at Fort Lee, New Jersey the signal at 99.7 MHz can be estimated. The Fort Lee receive antenna is 223 feet above ground level, the downlead loss is 3.5 dB, and the splitter loss is 3 dB. Converting -90.9 dBm to + 17.7 dB $\mu$  and totaling the values, the receive antenna would need a WJUX signal strength at its location on the roof of about 21 dB $\mu$ .

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During the inspection of each translator facility, extra effort was made to discover a hidden methods of signal delivery. The W232AL equipment, except the receive antenna and the cavity notch filter, is located in a single 19" equipment rack. Careful examination of the rack wiring revealed no unidentified wires or cables. Confirmation of the signal path was made by momentary disconnecting each point within the rack. The same method was utilized in the inspection of the W276AQ site. All wiring and interconnections were similarly accounted for. There were no sources of audio program input observed other than that provided by the off-air reception.

A Sony Model XR2500 receiver was evaluated in the laboratory facilities of Carl T. Jones Corporation. In addition to confirmation of the published specifications, particular attention was given to determination of its adjacent channel rejection characteristics. The second adjacent channel specification is published to be 70 dB rejection at 400 kHz from the desired signal frequency. No value is specified at the first adjacent channel 200 kHz removed.

These measurements indicate a minimum usable sensitivity of 1  $\mu$ V, which is about 1 dB better than the published spec. The measurements at the second adjacent channel frequency injecting an unwanted signal 59.2 dB above the desired signal resulted in just perceptible interference. A further increase of the undesired signal to 62.2 dB above the desired signal caused a reduction of the desired output.

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An undesired signal at 99.5 MHz was injected and the level was increased until interference to the desired signal on 99.7 MHz was just perceptible. That undesired signal level was determined to be 33.2 dB above the desired signal level. The undesired signal was increased further until the desired signal was overwhelmed. The undesired signal was 42.2 dB above the desired signal level. It is therefore possible to receive a desired FM signal as long as the first adjacent undesired signal is no more than 33 dB above the desired at the input terminals of this receiver.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information and belief.

Executed this 7<sup>th</sup> day of November 1997.

  
John E. Hidle, P.E.



**CARL T. JONES**  
**CORPORATION**

**JOHN E. HIDLE, P.E.**

**EDUCATION**

Troy State University - B.S., Mathematics; 1964

Georgia Institute of Technology - M.S., Electrical Engineering; 1972

**TECHNICAL QUALIFICATIONS**

Registered Professional Engineer, State of New York

Registered Professional Engineer, Commonwealth of Virginia

**SUMMARY**

Mr. Hidle has over twenty-five years of experience in communications, electronics, and system analysis, design, and implementation. His communications-related experience includes facilities design, systems design, directional antenna design, frequency allocation studies, and proof-of-performance tests on antennas and communications systems. Mr. Hidle has managed numerous large-scale communications projects including satellite-based program distribution systems. Mr. Hidle has also managed an engineering group of more than 25 engineers, managers, and support personnel and has participated in international frequency allocations policy studies.

Mr. Hidle is currently employed by Carl T. Jones Corporation, a communications consulting firm.

**PROFESSIONAL EXPERIENCE**

Carl T. Jones Corporation (1997 to present)

Senior Consulting Engineer.

Mr. Hidle is presently engaged in the conception, design and implementation of broadcast systems for AM, FM and television broadcasting clients. Primary responsibility is providing senior technical support to the corporation in the various telecommunications and broadcast projects in which the company is currently engaged.

**Philips Laboratories (1992 to 1997)**

**Senior Member Research Staff.** Prepared draft comments for FCC NPRM for adoption of Philips GCR as US standard. Organized mobile receiver system and located field receive sites for AD-HDTV demonstration in Washington, DC in 10/92. Performed extensive propagation study to predict AD-HDTV signal levels at extreme distance (75-80 miles). Coordinated Echo Cancellation System demonstrations at the NAB Convention in 4-93 and 3-94. Organized over-the-air transmission of the Philips GCR by five of seven TV stations in Las Vegas. Organized through Philips Mexicana, in cooperation with TeleVisa, an over-the-air demonstration in Mexico City (5-93) of the Philips GC system for a meeting of North American broadcast organizations and officials of the Secretariat of Communications and Transport of the Mexican Government.

**Science Applications International Corporation/Carl T. Jones Corporation**  
**(1989 to 1992)**

**Senior Engineer, Systems Technology Group.** Mr. Hidle managed broadcast facility development projects at Carl T. Jones Corporation. His responsibilities included management of transmission system design projects, supervision of equipment and antenna performance tests and evaluation, and overseeing preparation of engineering reports prepared in support of applications filed with the Federal Communications Commission.

**John E. Hidle, P.E., Broadcast and Telecommunications Consulting Engineer (1986-1989)**

Mr. Hidle was engaged in his own engineering consulting practice which provided services to the broadcast industry and to high-tech telecommunications clients. The majority of his work in this capacity was with clients developing innovative uses for combined data and radio frequency technology and work with clients who required the combination of personal computers with wide-scale data distribution through broadcast facilities. The services he offered included evaluation of developing technologies; solutions to unique engineering problems; conception, development, and implementation of electronic communications systems; theoretical studies; studio and transmission systems design and project coordination for building new or rebuilding old facilities; technical presentations before the Federal Communications Commission; preparation of FCC applications for new or changed facilities and evaluation of broadcast properties; expert witness services before the FCC and in Courts of Law; field measurements of AM, FM, and TV signal strengths; and design, adjustment, and proof-of-performance of directional antennas for AM radio stations.

**American Broadcasting Companies, Inc. (now Capital Cities/ABC, Inc.) (1975-1986)**

**Manager of Allocations and RF Systems (2 years).**

**Director of Allocations and RF Systems (2 years).**

**Vice President of Radio Technical Operations (7 years).**

As Manager of Allocations and RF Systems, Mr. Hidle had two primary areas of responsibility: 1) his department maintained all FCC licenses, prepared all applications for new services and renewal of existing licenses, inspected the company's radio and television stations to insure compliance with the FCC's Rules, evaluated regulatory proposals which might affect the company's operations, and participated in rulemaking proceedings before the FCC. 2) Mr. Hidle's group evaluated the technical facilities of the owned radio and television stations, the networks, news, sports, and all other company-operating divisions in order to determine the needs and make recommendations for improvements in/or replacement of these operating plants.

It was Mr. Hidle's responsibility to diplomatically work with the division level managers throughout the company to provide his department's services, to assure the proper maintenance of the company's assets, to jointly develop capital budgets and prepare the five-year capital plan, to set goals for his department to design and implement new facilities based on that plan, and to prepare and maintain a personnel plan through which those goals could be achieved.

As Director of Allocations and RF Systems, Mr. Hidle expanded his department to provide engineering services to the TV network affiliated stations. The new department consisted of the Allocations Group, the RF Systems Group, and the Affiliate Engineering Services Group; each headed by a manager who reported to him.

As Vice President of Radio Technical Operations, he was responsible for the efficient operation of the ABC Radio Division which included four radio networks and 13 radio stations. Mr. Hidle evaluated the division's operating needs, obtained the concurrence of division management, and prepared the plans and set goals for all engineering projects. He prepared capital and operating budgets, evaluated manpower requirements, and participated in labor negotiations. Mr. Hidle directed the dealings with the FCC and served on industry committees attempting to influence government regulatory actions favorable to good engineering practice and standards. He was alert for opportunities for growth of the broadcast business and provided guidance for the technical philosophy and engineering policy of the company.

In 1979, Mr. Hidle was charged with the development of a satellite distribution system for the ABC radio networks. His tasks were to develop and present the technical specifications which the network required and to work with equipment manufacturers to



find the most efficient and technically correct method of transmitting large numbers of audio programs through a satellite to about 2,000 radio stations. The resulting system has become the accepted standard for the radio network industry and is used by ABC, NBC, CBS, RKO, MBS, and others to deliver a very high quality audio service to the affiliated radio stations.

Mr. Hidle participated in international frequency allocation matters in 1981 when the International Telecommunications Union was trying to determine the allocation policy for medium wave transmission in the western hemisphere.

Mr. Hidle represented the broadcast industry, on behalf of ABC, NBC, CBS, and the National Association of Broadcasters as a member of the United States Diplomatic Mission serving on a Panel of Experts convened to study frequency spacing. The Panel included engineers from most of the countries in the western hemisphere. At the conclusion of eight weeks, the Panel issued a report to be used in a later regulatory conference.

During Mr. Hidle's 11 years at ABC, he worked to rebuild the company's technical facilities. New studios were installed at the ABC radio networks and at all 13 of the ABC radio stations. New transmitter plants were installed at 11 of the radio stations and four of the five television stations. Ten of the radio stations and three of the television stations acquired new antennas.

#### Gautney and Jones Consulting Engineers (1973-1975)

Consulting Engineer. Mr. Hidle's duties included allocation studies to find frequencies for new radio stations in specific locations; the preparation of engineering applications to the Federal Communications Commission; the design of directional antenna systems for AM radio stations, directing the installation of directional antennas, field adjustment and proof-of performance of these antennas; the supervision of radio wave propagation measurements and the evaluation of the results; and any other engineering duty a client might require.

#### RCA Corporation - Records Division (1972-1973)

Senior Engineer. Mr. Hidle developed two major projects during this period. He conceived a simpler method and designed the necessary hardware to produce the new four-channel disk recordings which RCA Records had introduced. He also developed a method to double the output of the duplicator machines which produced eight-track stereo tape cartridges by increasing the copy speed from 16 times to 32 times the normal play speed.

**Pacific & Southern Company, Inc. - WXIA-TV, Channel 11 (1969-1972)**

**Engineer.** Mr. Hidle was a member of the technical staff of WQXI-TV (now WXIA-TV) while he studied electrical engineering at the Georgia Institute of Technology. His responsibilities included the maintenance and operation of the television transmitter and associated equipment.

**Taft Broadcasting Company - WBRC-TV, Channel 6 (1965-1969)**

**Engineer.** Mr. Hidle joined the technical staff of WBRC-TV at the beginning of the installation of new studio facilities. Additional duties included maintenance of both studio and transmitting equipment for both television and radio.

**Woods Communications Group, Inc. - WTVY Television, Channel 4 (1964-1965)**

**Engineer.** As a member of the technical staff of WTVY, Mr. Hidle maintained and operated broadcast television studio and transmitting equipment.

**Troy Broadcasting Corporation - WTBF-AM (1961-1964)**

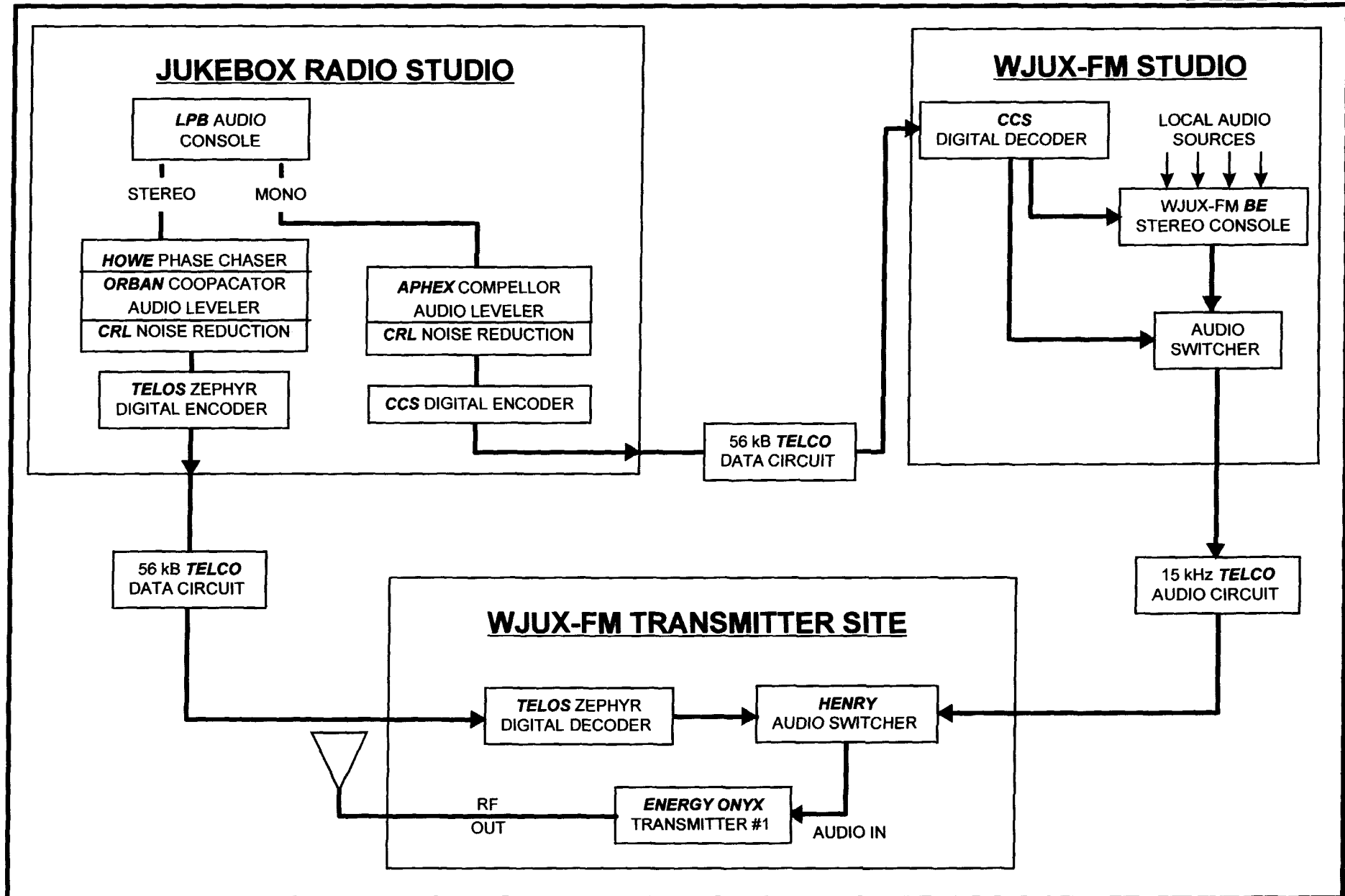
**Engineer.** Mr. Hidle was employed while attending Troy State University by radio station WTBF-AM for the maintenance and operation of the transmitter and directional antenna system.

**Geneva County Broadcasters, Inc. - WGEA-AM (1957-1961)**

**Part-Time.** Mr. Hidle was employed part-time during high school as an announcer-disk jockey. He obtained FCC First Class Radiotelephone Operator License in 1960.

# AUDIO PATHS TO WJUX-FM FROM JUKEBOX RADIO NETWORK

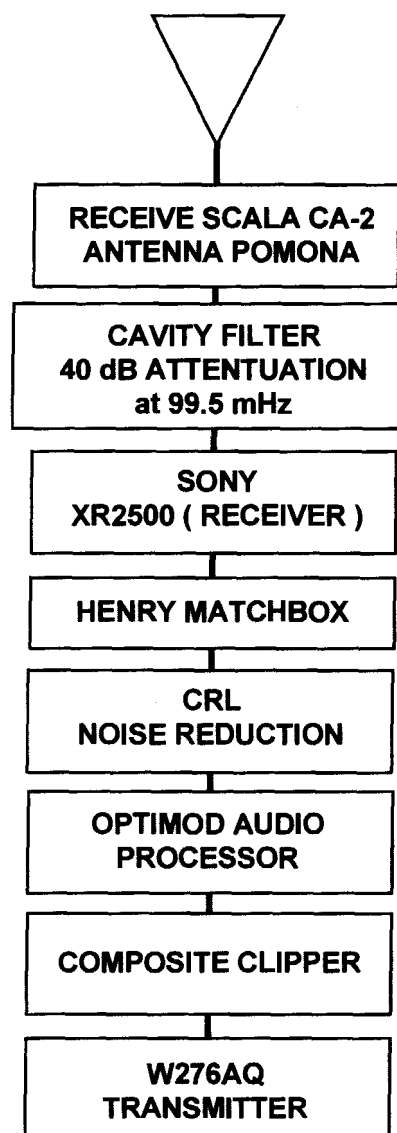
ATTACHMENT  
1



# OFF AIR RECEPTION TO W232AL

ATTACHMENT  
2

## MONTICELLO TO POMONA

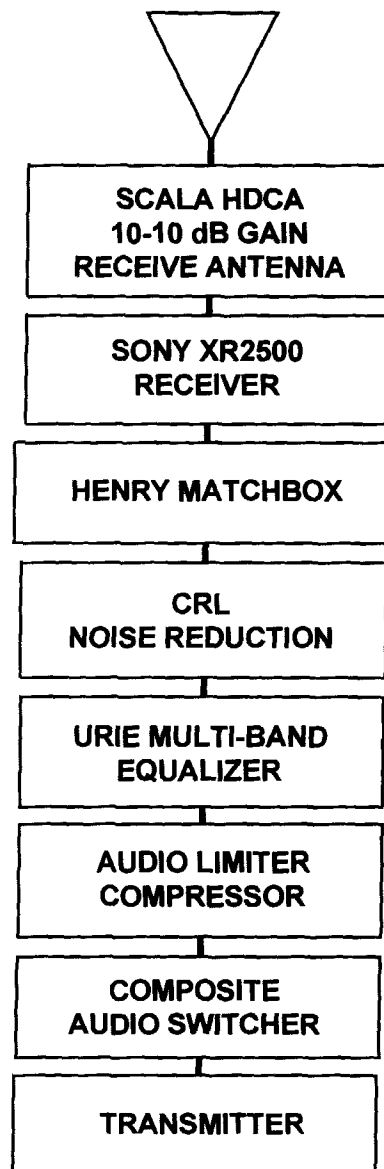


# OFF AIR RECEPTION TO W276AQ

ATTACHMENT

3

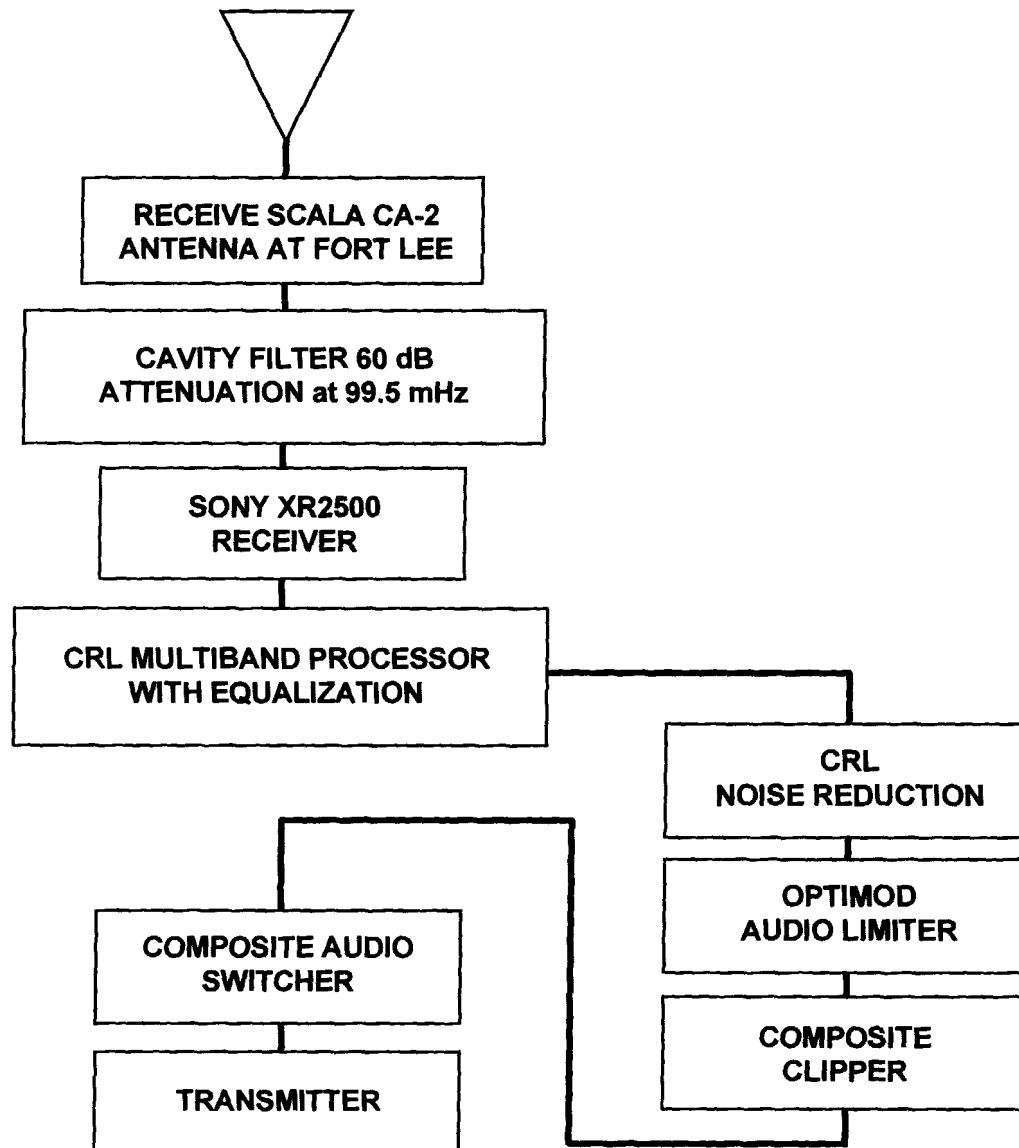
## POMONA TO FORT LEE



# OFF AIR RECEPTION TO W276AQ

ATTACHMENT  
4

## MONTICELLO TO FORT LEE



**TURRO EXHIBIT NO. 8**

Charles Naftalin  
Koteen & Naftalin  
150 Connecticut Ave  
Washington, D.C. 20036

Case No. 97-122 Official Exhibit No. T-8  
Disposition: Identified ☒  
Rejected Received ☒  
IN THE MATTER OF: Turne  
11-24-97 Shawel  
Date: Witness: Reporter:  
Page 2+3 withdrawn  
No. Pages: \_\_\_\_\_

Here's my tax forms for 1994 and 1995.

Mr. Rurro never gave me a 1099 form so you would have to look at his forms, o  
I.R.S. forms to see what he reported.

The only records I do have is when Turro paid me under the table, which  
I'm sure he never reported.

Regards,

Bill Gaghan



**TURRO EXHIBIT NO. 9**



# Telos Systems

2101 Superior Avenue  
Cleveland, OH 44114  
(216) 241-7225 • Fax (216) 241-4103

Jerry Turro  
Jukebox Radio  
75 Second Street  
Dumont, NJ 07628

10/20/97

Dear Jerry,

Regarding your inquiry about the RS232 ancillary data dropping out on the Telos Zephyr. Yes, there is a known bug that occurs in situations where the units are connected for hours at a time. This appears to be due to very short data dropouts in the main data path. These data dropouts cause very short audio dropouts and also may confuse the synchronization of the ancillary data decoder.

When this error mode occurs the audio will continue normally, however both the contact closures and the RS-232 data path will be interrupted. The Zephyr will normally remain in this state until the call is terminated and re-dialed. Or, in the case of dedicated lines, until one of the units is rebooted.

This bug has been reported by other sites where connections are maintained for longer than 12 hours or so. It does vary depending on the line quality. Since it only occurs on lengthy connections on lines with intermittent data, we have been unable to correct the problem so far.

Please do not hesitate to contact me if I can be of further assistance in this matter. Thank you for using the Telos Zephyr.

Sincerely,

Rolf Taylor  
Customer Support Manger

Case No. 97-122 Official Exhibit No. T-9

Disposition: Identified ☒  
Rejected Received ☒  
IN THE MATTER OF: Turro  
11-24-97 Shore

Date: 11-24-97 Witness: Shore Reporter: Shore

No. Pages: 1

Post-It® Fax Note	7671	Date	11/4/97	# of pages	1
To	Charlie	From	R. Taylor		
Co./Dept.		Co.	Telos Systems		
Phone #		Phone #	216-241-7225		
Fax #	202-467-5915	Fax #			

**TURRO EXHIBIT NO. 10**

28 October 1997

TO: Gerry Turro  
Jukebox Radio  
Fax: 201-439-0033

RE: PTX 80

Dear Gerry,

As per your request, I am sending you a letter confirming that the Bext PTX 80 exciter can not be externally remote controlled to raise and lower power output. The Bext PTX 80 was designed, built and sold without remote control power output adjustment capability. This particular model has since been discontinued.

Thank you for being a valued Bext customer.

Best regards,



Joseph D. Macdougall  
Technical Support  
BEXT Inc.

Case No.	Official Exhibit No.
97-122	T-10
Disposition:	Identified <input checked="" type="checkbox"/>
Rejected <input type="checkbox"/>	Received <input checked="" type="checkbox"/>
IN THE MATTER OF: <u>Turro</u>	
Date:	Witness: <u>Shanuel</u>
	Reporter:
No. Pages:	

**TURRO EXHIBIT NO. 11**

**Energy-Onix**BROADCAST EQUIPMENT CO., INC.  
VALATIE, NEW YORK 12184MAILING ADDRESS  
P.O. Box 801SHIPPING ADDRESS  
1306 RIVER STREET

Tuesday, October 28, 1997

Gerry Turro  
Jukebox Radio  
75 Second St.  
Dumont, NJ 07628

Dear Gerry,

This letter is to formally advise all concerned that the ECO series of Energy-Onix transmitters do not presently have, nor have they ever been equipped with, the capability of output power control via remote control.

The transmitter does have automatic power output control which will maintain the transmitter power output within 2% of a preset level even with a power line voltage swing of 10%.

In addition Energy-Onix has never modified an ECO transmitter to include the capability of transmitter power output control via remote control.

I have been employed by Energy-Onix in this capacity since October 1, 1990. I am familiar with all ECO Series transmitters that have been shipped since the product line was made available.

Should you have any questions please contact me at 518-758-1690.

Sincerely,

  
Ernest A. Belanger  
Vice-President MarketingEAB/ar  
Enclosures

Official Exhibit No.	
97-122	T-11
Identification: Identified <input checked="" type="checkbox"/>	Received <input checked="" type="checkbox"/>
IN THE MATTER OF: <i>Turro</i>	
11-24-97 <i>Shawel</i>	
Date:	Witness: Reporter:
No. Pages:	

**TURRO EXHIBIT NO. 12**

FROM : JUKEBOX RADIO  
SENT BY: CCS Consultants

PHONE NO. : 2014390033  
11- 4-97 11:40AM ;

2037394145-

Nov. 04 1997 12:09PM P:  
2014390033: # 1

# FAX



MUSICAM USA  
670 NORTH BEERS ST.  
Bldg. 4  
HOLMDEL, NJ 07733

Date 11/4/97

Number of pages including cover sheet 1

To:

Gerry Turro

From:

Dave Pearce

Technical Support

Ext. 129

e-mail dpearce@musicamusa.com

Phone (201)439-1031

Fax (201)439-0033

CC:

Phone (732) 739-5600

Fax (732) 739-1818

REMARKS

☐ Urgent ☐ For your review ☐ Reply ASAP ☐ Please comment

The CDQ1000's RS232 Ancillary data path can be interrupted without out interruption of the audio path. The Ancillary data path is multiplexed in with the audio path. Therefore, the audio is not disturbed even if the data path goes down.

Thank You,  
Dave Pearce  
Technical Support

Official Exhibit No.  
97-122 T-12  
Disposition: Identified ☒  
Rejected ☒ Received ☐  
IN THE MATTER OF: Turro  
11-24-97 Shaner  
Date: Witness: Reporter:

No. Pages: 1



**TURRO EXHIBIT NO. 13**